

In the Claims:

1-30 (cancelled).

31. (currently amended) A two-stroke motor of the rotary piston type comprising:

an engine housing;

a cylinder block rotatably mounted in the engine housing for rotation relative thereto;

a plurality of cylinders housed within the cylinder block;

a plurality of piston members, each member respectively within and associated with each cylinder;

a crankshaft indirectly geared to the cylinder block, the crankshaft journaled for a rotation within the engine housing, the piston members supported upon the crankshaft for [[a linear]] motion within the cylinder block as the crankshaft and the cylinder block rotate;

slidably mounted circular seal rings for sealing the cylinder block against the engine housing; and

at least one automatically rotatable induction timing ring operatively connected to the engine housing;

wherein a rotatable timing ring is provided to automatically vary the induction phase of said motor in response to changes in the rotational speed of said motor.

32. (previously presented) The motor of claim 31 wherein epicyclic gears are provided to indirectly gear the cylinder block to the crankshaft by a ratio of 2:1.

33. (previously presented) The motor of claim 31 wherein the cylinder

block and crankshaft rotate in the same direction relative to the engine housing.

34. (previously presented) The motor of claim 32 wherein the epicyclic gears are piggyback idler gears.

35. (previously presented) A motor as in one of claims 31-34 wherein the engine housing includes end casings; side entry and exit ports are located in the end casings; ports are provided in the cylinders, the side entry ports and cylinder ports in fluid communication to assist entry of combustion gases into the cylinders.

36. (previously presented) The motor of claim 35 wherein rotating cylinder-side seal rings and stationary casing-side seal rings and casing-side exhaust plates seal the cylinder ports and said side entry and exit ports by intimate contact therewith.

37. (previously presented) The motor of claim 36 wherein at least one air choke and at least one reed valve are provided to open the cylinders to atmosphere after combustion, allowing an air charge to pass across a crown of individual ones of said piston members, thereby purging said cylinders of a residual exhaust gas.

38. (previously presented) The motor of claim 37 wherein the quantity of said air charge is synchronized by the at least one air choke and reed valve to be proportional to the quantity of fuel/air mixture consumed by said motor.

39. (cancelled)

40. (cancelled)

41. (previously presented) The motor of claim 31 wherein an automatically variable air vent opening in a periphery of the housing is provided to assist in ensuring that the temperature of said motor remains generally within selected limits during operation.

42. (previously presented) The motor of claim 36 wherein the sealing of the casing-side exhaust plate against a cylinder-side outer seal ring is accomplished by the pressure of the exhaust gas.

43. (previously presented) The motor of claim 31 wherein a connecting rod is provided, having a big-end, and rigid guides in the crank case are provided to control and support a movement of the big-end.

44. (previously presented) The motor of claim 31 wherein air ports are provided in a cylinder wall, and an internal portion is provided in the or each piston member, which is cooled via the air ports.

45. (previously presented) The motor of the claim 31 wherein a primary compression of an induced gas is increased due to a solid base of said piston members meeting flush with said cylinder block.

46. (previously presented) The motor of the claim 31 wherein a charge used to power the motor having an unused portion, is returned to an incoming charge.

47. (previously presented) The motor of the claim 31 wherein one or more compressible synthetic rubber O-ring seals are provided, which, in combination with the slidably mounted seal rings, provide effective sealing of the motor even under thermal

expansion of said motor upon reaching an operating temperature.

48. (cancelled)

49. (currently amended) The motor of the claim [[48]] 52 wherein solenoids having extendible portions are provided to lock or unlock the plate into or from one or more selected positions, detent regions provided to receive the or each extendible portion.

50. (new) A two-stroke motor of the rotary piston type comprising:  
an engine housing;  
a cylinder block rotatably mounted in the engine housing for rotation relative thereto;  
a plurality of cylinders housed within the cylinder block;  
a plurality of piston members, each member respectively within and associated with each cylinder;  
a crankshaft indirectly geared to the cylinder block, the crankshaft journaled for a rotation within the engine housing, the piston members supported upon the crankshaft for a linear motion within the cylinder block as the crankshaft and the cylinder block rotate;  
slidably mounted circular seal rings for sealing the cylinder block against the engine housing; and  
at least one rotatable timing ring operatively connected to the engine housing, to automatically advance or retard the induction phase of said motor in response to changes in the rotational speed of said motor.

51. (new) A two-stroke motor of the rotary piston type comprising:

an engine housing;  
a cylinder block rotatably mounted in the engine housing for rotation relative thereto;  
a plurality of cylinders housed within the cylinder block;  
a plurality of piston members, each member respectively within and associated with each cylinder;  
a crankshaft indirectly geared to the cylinder block, the crankshaft journaled for a rotation within the engine housing, the piston members supported upon the crankshaft for a linear motion within the cylinder block as the crankshaft and the cylinder block rotate;  
slidably mounted circular seal rings for sealing the cylinder block against the engine housing; and  
a rotatable timing ring to automatically vary the transfer phase of said motor in response to changes in the rotational speed of said motor.

52. (new) A motor as in one of claims 31, 50, or 51, wherein a pivotable plate is provided; linear actuators connected to the plate are provided, connected substantially at an end of said pivotable plate, said pivotable plate operatively connected to the rotatable ring or air vent opening, to effect the automatic advancement or retardation.